

SANDIA GENERAL ATTORNEYS-Former General Attorney Frank Dewey, left, talks to Philip D. Wesson, who was named General Attorney for Sandia Corporation effective Aug. 1.

Payroll Deductions To Be Available for Credit Union Members

A payroll deduction plan is to be started for Sandia Corporation employees who are members of the Sandia Federal Credit Union. As soon as forms needed for execution of the plan are printed employees will be able to make deposits in the Credit Union or repay loans by regular deduction from their pay

The Credit Union recently approved loans for the purchase of new automobiles. The loans bear the interest rate of eight-tenths of one per cent per month on the unpaid balance. These loans likewise may be paid-off through payroll deduction.

Chartered in December, 1948, the Sandia Federal Credit Union now has 1106 shareholders with approximately \$164,800 on deposit. Total assets of the Credit Union are

President of the Board of Directors this year is A. H. Spengeman, 4150, W. C. Elskes, 2411, is vicepresident and J. W. Kunetka, 3120, is treasurer. Other members of the Board of Directors are C. W. Campbell 1920, J. J. Michnovicz 2462, E. B. Bergquist 2321 and J. E. Tillman 2120. Martin Grothe, 4151, is chairman of the supervisory committee and J. L. Hickey, 3122, is chairman of the credit committee.

After the close of business for the year 1951 members of the Credit Union voted a 5 per cent dividend to shareholders which netted them

It's Back to Jobs For Sandians After Military Service

Military life ended for three more Sandians recently and they are back on the job with the company.

Peter J. Cook started work again at Sandia in 2462 August 4 after serving with the Navy since February, 1951. Peter saw service in Korean waters on a Navy tanker for a good share of his time. While he was in service, his wife, Theresa, and daughter stayed in Albuquerque and Theresa continued working for the company in 2334.

Another returned serviceman is Alfonso Lujan, 2231, who has completed a two-year tour of duty with a National Guard unit. Al is married and has three children so is especially happy to be back in Albuquerque.

Stuart C. Breeding has returned to his job as security inspector at Sandia Corporation after serving with the 188th Fighter Interceptor Squadron in Long Beach, Calif. He was a staff sergeant in the New Mexico National Guard unit which was called into service in February, 1951. Stuart has been employed at Sandia since March, 1950. He is married and has two children.

Scout Leader Gives Vacation Weeks to Camp and Training

Boy Scout Troop Leader W. M. "Bud" Bacchus took his family on a busman's holiday last month. They went to a Boy Scout camp.

Bud, who works in 5413, spent the first of three weeks' vacation in June directing a camping trip for 14 mem-



"Bud" Bacchus

bers of his troop when they went to Camp Zia near Cuba, N. M. Then on the second week of his vacation, Bud took his wife, Louise, and their three sons, Bill, 12, Charles, 9, and Steve, 8, to the 130,000-acre Philmont Scout Ranch near Raton where he attended a Troop Leaders Training Conference.

The family lived in a "tent city," but took their meals in the spacious new mess hall, another facility donated by wealthy oilman Waite Phillips who has given "Philmont" to the Scouts along with revenue from a large building in Tulsa. At the troop leaders conference, the men operated in patrols similar to their own units back home, and attended daily instruction in various phases of Boy Scout work. The three branches of study under main consideration were "spirit," "participation" and "skills." While Bud went to classes, his family enjoyed the privileges of the ranch and shared in the activities scheduled for them.

Back home, Bud has 43 members of Troop 184, which is sponsored by Trinity Methodist Church. He meets with them once each week, and goes with the boys on their frequent camping and hiking trips. His oldest son, Bill, is a Star Scout, but the two youngest, who are in the Cub age group, are not as yet in a troop because none is organized in their vicinity. Bud affirms there is a definite lack of volunteers to lead Cub and Scout troops "Everyone wants their boy to become a Cub, or join a Scout troop, but we're having trouble getting parents to help out. We also are badly in need of merit badge counselors. We need men with backgrounds in radio or electrical work to give proper instruction to our boys who are working on their merit badges."

Bud is completing a home along with all of his Boy Scout activities, but he admits his scouting vacations this year have left a lot of construction undone. "It's worth it," Bud says, "we're build-ing fine citizens and that's important."



SANDIA CORPORATION, ALBUQUERQUE, N. M.

Wallis To Head Community Chest; Campaign Scheduled for Early October Honorary Degree

H. J. Wallis, 1900, has been appointed chairman of our 1952 Community Chest drive, succeeding F. L. Dewey, 6000, who has headed the campaign for the past two years. Mr. Dewey has received a letter of appreciation from O. C. McCallister, president of the Albuquerque Community Chest, for the excellent results of our last two fund drives.

An initial planning meeting of the new Community Chest committee was held Wednesday noon at the Coronado Club. In addition to the new and retiring chairman the meeting was attended by Al Cadwell, who was chairman of the Albuquerque drive last year; Jeff Greer, executive secretary of the Albuquerque Community Chest; Timothy E. Shea, our Vice President and General Manager, who has replaced George Landry as a director of the Albuquerque Community Chest; Fred Smith, Personnel Director and Treasurer, and committee members Harold Sharp, 3100, R. J. Hansen, 2200, Al Spengeman, 4150, Bob Cox, 3222, Curly Eggert, 2414, Kenneth Shinn, 2471, and Ted Sherwin, 3125.

The fund drive will be held early in October and Chairman Wallis is making plans to conduct a campaign which is expected to keep Sandia out in front as Albuquerque's leading supporter and contributor to the Community Chest.

Business Fraternity Seeks Members Here

The Alumni Association of Alpha Kappa Psi, national professional business fraternity, had a benefit party recently at the home of Fred Comstock, 4233. Twenty dollars was raised and turned over to the New Mexico Boys' Ranch.

Officers of the association include W. E. Prekker, president, and L. E. Aragon, 4152, secretary-treasurer. Any former members of AKP college chapters who are interested in membership in the alumni association, are asked to contact Fred Comstock, ext. 3-3256; Louie Aragon, ext. 2-8145, or Bill Prekker, ext. 5160.

Sandia Base Radio Hams Must Renew **ID Cards Immediately**

All radio hams who operate transmitters on Sandia Base are being reminded that all Identification Cards issued in accordance with Post Memorandum No. 17, Headquarters, Sandia Base, expire today.

To renew the cards it is necessary for operators to contact Steve Castoria at the Military Badge Office in order to sign the inserts for new

There Are Good Causes for Red Eyes, Sore Noses And Sneezes This Year

Hay fever victims will find some reasons, if slight relief, for their suffering in the following article prepared for the BULLETIN by Dr. F. C. Hirsch, Medical Director for Sandia Corporation.

There are a lot of bewildered and unhappy people in Albuquerque this summer. They are shedding copious amounts of tears which are not due to their bewilderment or to their unhappiness, but rather to the irritation of their eyes due to large amounts of pollen in the air. These are the hay fever victims who find their lot worse this year than ever.

No Escape

Many of these people have come to this area within the past four or five years in order to escape the disease. At first the effort to escape seemed to have been successful since they had either no symptoms or few since living here. This year, however, all of the old troubles have returned. "What has happened?" they ask their physicians. They might better direct this question to the weatherman or a botanist, because the answer can best be supplied by them rather than the doctor.

Think a minute about the marked differences in rainfall and humidity levels which have prevailed this spring and summer. Then take a look at the mesa. Because there has been more moisture, there has resulted an unusually heavy growth of vegetation, so the production of pollen is up many thousandfold. Because of the increased relative humidity that abundance of pollen is hanging close to the ground level, making its contact with the eyes and nose more likely. Thus the season for the increase in hay fever symptoms is due to the abundance of the causative agent-pollen in the atmosphere.

Gigantic Weeds

Another factor has entered the picture which accounts for the presence of hay fever symptoms in people who have not had any trouble since coming to New Mexico. This year

for the first time in about five years the available moisture is such that plants like False Ragweed and others are growing in rather lush stands round and about. The next time you go down Gibson Avenue towards the center of the city look at the gigantic plants which are growing in the ditch. A growth such as this hasn't been in evidence for many years. Regrettably False Ragweed is cross allergenic with True Ragweed which means if the real McCoy gives you hay fever its kissin' cousin will too!

There it is again. It's the old business of having cake and eating it. Either we have no moisture, few plants and little hay fever, or we have moisture, lots of plants and lots of hay fever. No moisture lots of dust; lots of moisture - no dust. Lots of dust - plenty of other troubles! Taxes, dust, pollen, sniffles, sneezes, bills for pills, flash floods, and so it goes. Depressing,

H. C. Beal, Sandia Director, Awarded

August 15, 1952

H. C. Beal, a Director of Sandia Corporation and Vice - President Manufacturing of the Western Electric Company, has been awarded the honorary degree of Doctor of Engineering by Purdue University. The degree was conferred on Mr. Beal



H. C. Beal

at the 1952 Purdue Commencement in Lafayette, Ind., "in recognition of his outstanding professional achievement during his years with Western

Mr. Beal began his Bell System career immediately after graduation from Purdue in 1914 by joining the Students Training Course at Western Electric's Hawthorne plant. By 1929 he was superintendent of the operating branch at Hawthorne. In 1935 he was transferred to Western Electric's Kearny, New Jersey, plant and in 1939 became Kearny Works

In 1942 Mr. Beal was transferred to Western Electric Headquarters at 195 Broadway, New York City, as Engineer of Manufacture. He was elected vice president and a director of Western Electric Company in

He is a member of Eta Kappa Nu (engineering fraternity), the Western Society of Engineers and the Railroad Machinery Club of New York, Mr. Beal married Miss Nola B. Hollenback in Logansport, Ind., Sept. 28, 1915. They have a son, Dick Hollenback Beal. The Beals reside in South Orange, N. J.

Mr. Beal has many friends at Sandia whom he knows through his long association with Western Elecmade many new friends as a result of his business visits at the Laboratory in the past several years.

Beachcombers Party Tomorrow Night; Full Program For Remainder of August

If you miss it you'll be sorry. Careful planning has gone toward making sure the Beachcomber's Party at the Coronado Club tomorrow night is a carnival of fun and frolic.

The club will be completely decorated to resemble a South Sea island and beachcomber type costumes which can be just about anything will contribute toward the spirit of the occasion. Incidentally, prizes are to be awarded to the couple in the most attractive costume and to the couple in the most original costume.

To top it all off a \$1.50 barbecue dinner will be served starting at 7:30 p. m. Tommy Sinclair will strike up his orchestra at 9 and the festivities will last until 1 a. m. Sound good? Then get your reservation now.

Next Wednesday night is Bingo night again and this time the 17 inch television set that was part of an alternate jackpot the last time is going to some lucky winner for sure. If it isn't won in the jackpot it will go as a consolation prize-someone's got to win it.

Dancers will gather again Saturday, the 23rd when Al Jordan and his orchestra perform for the Club's Informal Dance from 9 to 1. The next night it will be Charlie Biesel who will play for the Sunday buffet-dance. This bargain of bargains will be \$1.75 per usual with all you can eat and an evening of dancing included. Reservations are limited so be sure you make yours in advance.

Bridge instruction is slated for the 18th and 25th with square and folk dance instruction set for the 19th. The Duke City Cowboys will keep the beat again for the square dance on Friday the 22nd from 8:30 to 11:30. Refreshments will be served after the dance.

Bridge fans are looking forward to the duplicate games planned for the 28th. Twenty-five cent donations will go toward prizes and the affair will last from 7:45 to 10:30.



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Telephone Ext. 25253

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Security Is a State of Mind

One day, a good many months ago, the wife of a Sandian came home from a beauty shop and related to her husband some information concerning the atomic energy program which he had been careful not to mention even to close working associates. Several years back a government agent was given entry to a restricted area on a military base with a pass containing the photograph of an airedale. And it was only a year or so ago that the newspapers related that two youngsters stole into the mint in Washington and had a field day amongst the millions.

It's these amazing violations of security which occasionally jolt us to the realization that we have a big job on our hands to protect our government's defense efforts. We have traitors, many are known and their names, such as Benedict Arnold and Klaus Fuchs, will live in infamy as long as history records such events. We have our heroes in the fight for security and they will probably go unsung, and be remembered only as those hardworking men and women in the AEC, FBI, and other agencies charged with these duties of safeguarding our efforts.

That brings us to the folks who will never be heroes or traitors; they are the people who work day after day in the industries of our defense program. These folks cannot trap many spies, they cannot carry guns for protection, they cannot slip their secrets deep in their pockets or minds and consider them safe. Following rules, regulations and laws is a good start for complete security, but will not bring the person close enough to that goal

It takes a proper state of mind to be security safe. That state of mind calls for sound judgment, an alert mentality and a controlled tongue. And we have to exercise these traits automatically and continually. It isn't easy, but if we cannot qualify we should not be working here.

Agnes Williams, 2464-1, returned recently from a two week vacation with her family in Newark, N.Y.

Congratulations to Frank O. Sandoval, 5421, and his wife who welcomed a new daughter, Melanie Lynn, July 11.

Martell Lambert, 2461-2, is spending her two week vacation visiting points of interest in New Mexico with her parents and sister who came from Kokomo, Ind.

Berenice Henry, 2461-2, has returned from a 4,000 mile vacation trip with a friend. They spent three weeks touring from Texas to Minnesota.

Enjoying a two week vacation from 2461-2 is Fern Green.

Congratulations are in order for two proud fathers of 1211. Oliver L. Bashor is beaming over the birth of a son, Danny Gene, who weighed in at 7 pounds, 13 ounces. Sandra Lynn is the name selected by John M. Brammer for his new daughter, who weighed 6 pounds, 12 ounces. John's first child is a boy.

Vacation plans for Frieda P. Salazar, 4222, include flying to San Francisco with visits to Los Angeles, Long Beach and San Diego.

Howie Mauldin, 1213, will spend his vacation visiting relatives and friends in his hometown in Mississippi.

Margaret Reese, 3160, and her husband, W. Howard Reese, 2125, accompanied by their two sons, flew to Florida where they are enjoying a two week vacation.

Lola Brunacini, 3160, is at Salton Sea where she is replacing Frances Voorhees, also 3160, while Frances takes a vacation.

R. K. Moore has been requested to present a paper to the Research and Development Board of California Institute of Technology. Dr. Moore is a member of 5412.



NATURE GIRL Mary Foster, 4222-5, is the wood nymph snapped in this candid shot taken while she was on a picnic in the Manzanos Mountains recently.

Albert Trujillo, who joined the Marine corps nine months ago, has returned home for six months, but will return to the corps at that time when he reaches the proper age. Albert, only 16, is the son of Aquiles Trujillo, 4152.

Frank Adams, 4152, and his family recently returned from a short vacation at their ranch in southern New Mexico.

When Jim Harmeyer, 4151, took his recent vacation, he spent the time moving into his new home.

Harvey Richards, 4152, has joined the happy home owners ranks with a new place in the valley.

Oliver Ash, 2351, spent four days fishing recently at El Vado.

Bill Simpson, 2351, is enjoying a two week vacation seeing the sights of Arizona, New Mexico and will also include a visit to Mexico.

Mel Pliner, 2352, spent an enjoyable week loafing and fishing near Truth or Consequences.

AROUND THE DEPARTMENTS

The personnel of 2350 honored W. B. Ferguson and D. B. Miller with a farewell party August 5. Both are transferring to other departments.

Helen Grotberg, 2352, is spending one week of her vacation visiting in San Diego.

The new car bug has hit Organization 2334-1. Proud owners include Irene Brian, Della Gonzales and Theresa Cook.

While her husband is home on leave from the navy, Elizabeth Wallick is vacationing from 3152-3. He will leave soon for Officers Candidate School in Rhode Island.

Mollie Nason, 3152-3, accompanied by her small son, spent a week at the Grand Canyon recently.

Visiting relatives in North Carolina is the vacation schedule for Allie Dayton, 3151.



MAKING BOOKENDS while on a recent junket to Juarez are Betty Phelps, AEC, (left) and Marie Eichsted, AFSWP. The girls saw the little carved bookends of a Mexican Senor and Senorita in the Juarez shops and thought up the idea of imitating them as shown.

Congratulations to Bill and Jeanne Scott. Their daughter, Del Jeanine, was born August 4, weighing 7 pounds, 15 ounces. Bill is a member of 1922-2.

Ella Albertson, 1924-2, is happy to have her husband at home again. "Dub" was released from the Veterans hospital last month.

Employees and their families of 1924-2 spent July 26 on a picnic in the Sandia Mountains.

Walter E. Tigner is visiting his home town of Seminole, Okla., and other points of interest in the state while on vacation from 2414-1.

Sporting a new Olds 88 is Marshall Servis, 2414. Another new car owner in 2414 is Manuel Sanchez who has a 1952 Ford.

Fellow workers are looking forward to Marcella Dunkelberger's return to 2410. Marcella is recuperating from an emergency appendectomy

Earlan Koehler, 2416-3, and family spent a two week vacation recently traveling in Texas and Acunia, Mexico. Earlan says the fishing was good in Texas but he didn't elaborate on how big the fish were.

Driving a new car after a trip to Espanola and Santa Fe is Gabriel Chavez, 2232. His friends say it was a well "spent" vacation.

Showing her aunt from Illinois the high spots of interest in Albuquerque during the last week has been the pleasant pastime for **Helen Moulder**, 2232.

Anyone interested in competing with workers in 2232 during their lunch hour horse shoe matches should get busy for the boys are said to be improving rapidly. For bookings, call Cossell on ext. 26154.

John B. Noe, 5413, and family spent their recent vacation in Los Angeles where they visited his mother.



A BIG CATCH — While vacationing in Florida with his grandparents, George Schulz, 8-year-old son of Lee Schulz, 1211, caught this 5-pound dandy.

Except for car trouble on his return trip, George Blea, 1922-2, had a wonderful vacation in Mexico City. While there he met the wrestler, Juan Garcia, and entertained him at dinner recently at the Blea home.

Three new home owners in 1922-2 are Frances Odle, Dennis Salazar and Dick Burnam.

"Duchess," the female Cocker spaniel belonging to Gerry Hahn, 2410, has contributed eight puppies to the Hahn household. Incidentally, the papa's name is "Duke."

L. D. Chapman, 2414, is enjoying a two week visit in his home town, Henrietta, Okla.

Friends of Alice Prather, 2231, are telling her those white side wall tires on her new Chevrolet are "real purty," but she'll have a lot of work keeping them clean.

Vacationing in Oak Creek, Arizona, is **Mary Lunsford**, 2231, who is renewing acquaintances and visiting relatives.

The Irwins have joined the new home owners in Albuquerque. Floyd, 2232, and Edith, 2231, are also enjoying a visit from her mother at the new residence, 833 Cagua Dr., SE.

Friends and relatives in Cisco, Texas, were happy to see Edmond Starr and his wife during their recent visit there. Edmond was vacationing from 2232.

The family of Clarence Puthoff, 2232, attended the Cowboys Reunion in Las Vegas recently, accompanied by Clarence's two brothers who came from Ohio for the event.

Dolly Willis, 1921-2, entertained at a patio party recently for members of 1921-2 and 1922-2. Everyone reports a most enjoyable evening.

Home from a trip to Oklahoma City is 4131's LaZona McClintock.

Jimmy Sachen's new Boxer pup has been christened "Duke." Jimmy is a member of 4131.

The **Duane Hillards** are enjoying a week's vacation, complete with fishing, at Lake City, Colo. Duane, 4152, said he'll spend the second week of his vacation on chores around the house. Joann used to work in 3125.

Sid Merriam, 4133, is spending his vacation in Denver and vicinity.

Jim Birchfiel's comments on his recent vacation jaunt to Tennessee were that the weather was "hot and dry"—and this after living in New Mexico. Jim is a member of 4135.

A: D. Middleton recently returned to 5415 after a three week absence for surgery.

B. J. Bittner, 5412, was awarded a golf bag and a wallet for winning the 50-yard backstroke, and placing second in the 100-yard free-style at the swim meet recently at the Coronado Club.

Thelma Renwick, 2463, accompanied her husband and son and her mother from Pennsylvania and her aunt from Toronto, Canada, on a recent trip in the Southwest. Some of the highlights of their trip were visits to Carlsbad Caverns, Los Angeles, Long Beach, San Francisco, Boulder Dam, Grand Canyon, and the Painted Desert.

Jerry Hurley, 1713, says he really enjoyed his vacation. "Stayed home and just loafed," he reports.

Department 1710 welcomes the following newcomers who transferred in recently: Carlisle Waugh, Norman Maguire and Mrs. Johnnie Johnson.

Co-workers of Clyde Green, 2231, are glad to hear that his little boy is recovering satisfactorily after an attack of polio last week.

George Arnot, 5414, was forced to land his plane on the Apache reservation in Arizona during a recent flight to Phoenix. George who has completed two years flight training relates the reason for the emergency landing was a lowering fuel supply and strong headwinds.

Her friends in 4135 send **Dotty Bair** many wishes for a speedy recovery.

The recent thunder showers proved too much for the convertible-loving Smiths, Amie, 4130, and Carl, 1951, so it's a new car with a genuine hard and waterproof top.

The C. J. Baumgartners are off with their young Ohio house guest for a Yellowstone and San Francisco vacation. Carl is a member of 4133.

Charles A. "Buck" Weaver, 2452, returned July 27, after two weeks active duty as a major with the 4052nd D.R.A.S.U., station complement, Fort Bliss, Tex. His primary duties were with the base Provost Marshal's office.





MOTHER AND SON from Sandia drove 2900 miles on their vacation recently. Pictured here while on vacation are Carrie Vick, 4135, above, and her son, Gary, 5242. They drove Gary's new convertible and visited Salt Lake City, the Tetons, Yellowstone Park and Colorado on their eight-day jaunt.

Speaking of Reporters

This is another in a series of personality sketches telling of the Sandia Bulletin reporters who write news of you and your co-workers.

For more than a year now Alice Winchell - no relation to Walter has been sending out news flashes from organizations 2331, 2335 and 2333. During this time she's worked out a sort of grapevine system of gathering news. Alice seldom makes regular rounds of her co-workers to collect news, instead everything of importance that happens on her beat manages to filter from desk to desk until it reaches her. Then she checks the stories for accuracy and usually has several good items for the Bulletin's departmental news.

Alice came to Sandia in 1950 from Marquette, Mich., her home town. The way she happened to come here is a story familiar to many Sandians. She visited Albuquerque on a vacation trip in 1949, liked it enormously, applied for a job at Sandia, went back home to wait for clearance and then came down to stay.

Before joining us Alice worked for four years as a secretary in the Marquette county courthouse and a year as secretary in the county comptroller's office.

Last St. Valentine's Day Alice married Sergeant Jim Winchell. Together they're building a home in the Sandia Mountains about 17 miles from the base.

"We've got about two acres and we're putting the house up by our-



Reporter Winchell

selves. We change our plans so often it would be hard to say exactly what style house it is, Winchell-style my husband calls it."

All in all they're a pretty busy couple. Besides working on the base and building their own home, they take care of their dog, a Chesapeake Bay Duck retriever, and their family of rabbits which recently received 14 additions.

Thrift Lesson Results in Ranch Where Father, Son Ride Herd on Earthworms

Jake Young is a worm rancher. That's right, worms. And he runs his worm ranch just like a cattle ranch. He has pasture land, breeding pens, a place for the calf worms, and he keeps a sharp eye out for rustlers.

Of course there's a few minor differences between worm ranching and cattle ranching. Jake hasn't figured out a way to brand his stock yet and his round-up methods are a bit unique, but all in all Rancher Young figures he has the edge on the beef barons chiefly because of his infinitesimal overhead.

"Ah reckons ah get at least 99 per cent profit off'n mah stock," he says.

The Young Worm Ranch is a family venture. In fact it was founded by 8year-old Jake, Jr., at his father's suggestion. Jake, Sr., became a partner when the business expanded too fast for little Jake to keep up.

It all started about four years ago when the boy asked his daddy for a

'Son," Jake said, "you're getting to be a big boy now, going on to five years old, and it's about time you started earning some money of your own. Now when I was a boy I never had to ask my daddy for money because I made all my own selling worms to fishermen. Why don't you run out and see if you can do the same?"

Jake didn't realize what he was starting. His son couldn't dig worms fast enough to satisfy the flood of customers and within a year the child was on his way to cultivating a successful businessman's ulcer. When it became evident that the

demand was exceeding the supply Jake the Elder stepped in to help his son build up the stock.

"At that time I was working on the night shift at Sandia, so I had plenty of time in the day to go to the library and study worms.

As a result Jake is a font of knowledge on earthworm antics.

'Without the worm, man could not he declares, "because the ground would lose its fertility, plants would cease to grow and animal life would

According to this wizard of wormology the little beasties live from 18 to 20 years, get drunk on onions, and grow up to 24 feet in length in some parts of South America.

Pep Up on Onions

Their addiction to onions was something Jake discovered for himself. By accident some chopped up onion happened to be mixed up in the loam surrounding a batch of worms Jake intended to sell. When he dumped them out for appraisal by the prospective customer the little things took off in several different directions performing some very unwormlike gyrations on the

"They sure looked lively, though," Jake recalls, "and the customer was really impressed so now I always give them a shot of onion just before I sell

On cattle ranches round-ups are held only once a year, but on the Young ranch, which consists of an acre in the valley, round-ups are held whenever the market shows a need, which is two or three times a week rising to a peak on week ends when the fish are hungry

several volts along them. The results, you should pardon the expression, are electrifying. The only trouble is that while plenty of worms come out of the ground on the run, the ones that can't make it out in time are electrocuted.

Worms Scurry Out

The best system, Jake has found, is by fiddling or vibrating them out. He shoves an ordinary wooden pole in the ground, then takes a stick and rubs the pole. When the ground starts shaking around them the worms think the end of the world has come and they head for open air in a hurry.

An hour of fiddling netted Jake 1400 worms once, but the average is 800 an hour. That still isn't bad at all, considering they sell for a dollar per hundred.

Jake is loud in his praises of the worm race. He can spout statistics by the hour on the wonders a herd of worms will perform on a lawn or garden. That's his ultimate aim, to raise worms for the barren yards of Albuquerque residents. By carefully raking old leaves and kitchen scrapings spiced with onions onto their grazing grounds he hopes to build up an annual herd of 200,000 worms.

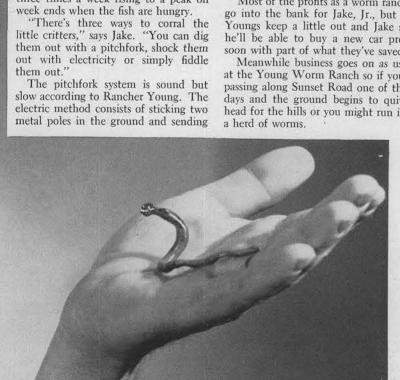
To spur this expansion Jake selects the finest worms from his stock and breeds them in old tomato boxes in his garage. A worm is both a he and a she at the same time, but two still are needed to reproduce. They leave a little capsule chock full of eggs and under the right conditions this hatches hundreds of baby worms usually inside a month.

Worms for Sale

Jake, who works in 2126, has a sign up in front of his place at 1430 Sunset Road but when his stock is big enough he plans to branch out all over the city, selling not only worms to fishermen and gardeners, but worm soil for potted

Most of the profits as a worm rancher into the bank for lake. In but the Youngs keep a little out and Jake says he'll be able to buy a new car pretty soon with part of what they've saved.

Meanwhile business goes on as usual at the Young Worm Ranch so if you're passing along Sunset Road one of these days and the ground begins to quiver, head for the hills or you might run into



THE WORM TURNS and from the hungry expression on its face worm rancher Jake Young had

better toss it some fodder or the critter's likely to stampede.

Our Company Profits from State's "Natural Resources"

Original Americans Provide Manpower

A feature on New Mexico in a recent issue of *Holiday* magazine stated that Indians are one of the state's greatest natural resources. They're more than that. They're an integral part of the labor force that keeps the state and the nation

We have proof of that right here at Sandia where Indians are employed in capacities that have nothing to do with their value as "natural resources."

John Platero is one of these. John is a Navajo, born near Gallup, N.M. In his youth he traveled all over the Southwest with his father who was a trader. It was his father who taught John silversmithing, a trade that came in handy later on during the depression when he married and settled on a New Mexico Indian reservation and made a living at the trade. He found the close work hurt his eyes, however, and has since given it up.

Enjoys Job

John joined Sandia about a year and a half ago after working for two years with one of the contractors building the Base. Today John is a labor layout man in 2421. He's the proud father of four children and he says he enjoys his job more than any he's ever had before.

Another Navajo Indian working in 2421 is Billy Roger. He also worked as a silversmith for many years, a trade he learned in Indian School. He still keeps his hand in by taking special orders and doing the work evenings in his Albuquerque home. Billy is a veteran of 32 months in the Army and was with the 94th Infantry Division in Germany. After his discharge in 1946 he worked as a silversmith for a year and then with a local contractor until he came here a year and a half ago.

Billy is married and has five children.

If you visited Santo Domingo Pueblo late last year you probably saw Marcus Coriz perform in one of the annual dances. Marcus is an energetic man who was brought up in Santo Domingo and still has a home there. In fact he was almost elected to an office in the Pueblo government recently but had to decline it in order to attend watch repair school.

At present Marcus works in the Coronado Club kitchen afternoons and evenings and goes to watch repair school in the mornings. He'll finish his present course in a year and a half.

Trapped at Bastogne

Marcus is a veteran, too. He was attending Indian Agricultural School in Chilocco, Okla., when he was drafted in 1942 and he served in the 28th Infantry Division until 1945 as a machine gunner. He was in on the invasion of Normandy and he was one of that gallant group of men who fought their way out of the trap at Bastogne.

Marcus and his wife, Stella, live in town during the week and go up to their Santo Domingo home on week ends.

Another Navajo working in 2421 is Peter Peshlakai who does maintenance work at the Coronado Club. Peter joined us last February and before he came here he worked for 20 years as a silversmith.

Peter was born and raised near Crystal, N.M., where he helped out on the family ranch until he started school at Fort Wingate, Ariz. The art of a silversmith was learned at the school and through his father's tutoring. Peter came to Albuquerque in 1932 and he's been here with

Sympathy

Our sympathy is extended to Alfred M. Gallegos, 2452, whose father, Oliveros P. Gallegos, died August 4.

Company employees extend sympathy to John A. Christopher, 2334, whose father died August 3.

Sympathy is extended to Harold Keith, 2124, because of the death of his brother-in-law who was killed in an airplane accident.

his wife and two daughters ever

Although he doesn't work with silver as a living any more he still keeps his hand in by doing an occasional job at a little shop in his home.

So you see, these men are more than "natural resources," their work is important to us here at Sandia and to America.



John Platero



Billy Roger



Marcus Coriz



Peter Peshlakai

"The Great A-Bomb Robbery"

Fuchs Tells Russians of Violence In First Atomic Test Near Alamagordo

By Bob Considine International News Service Staff Correspondent (World Copyright, 1951, by International News Service)

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This is the seventh article of an eleven-part series telling how Russia, in the most sinister cloak-and-dagger conspiracy in history, stole America's A-Bomb secrets.

Harry Gold, the gentle-mannered atomic spy, used his hard-won vacation from the Pennsylvania Sugar Company, of Philadelphia, for his trip to Santa Fe, New Mexico, in June, 1945, to pick up priceless atomic information from Dr. Klaus Fuchs.

It was inconvenient for him, and costly too, for the Russians never gave him enough to pay his expenses as one of their top couriers in this country. Gold willingly paid the rest, usually about half. That had been the case since he formed his alliance with the Reds.

Gold never complained. Once, long before he was promoted to atomic spying, he told his mother in Philadelphia - after a sleepless day and night of work-that he was going to bed and "don't wake me up even if God calls me."

Two hours later, in response to a phone call, he was on a street car enroute to Broad Street Station in Philadelphia. He had been summoned by one of the five or six communist intermediaries for whom he worked for years. He journeyed to New York, took a long subway ride to the remotest Bronx, walked for blocks in the rain, reported to his superior, was bawled out for not delivering more information, and was sent back to Philadelphia arriving, wet to the skin and on the point of fainting from exhaustion, near dawn.

Gold Makes Mistake

If there was any distress connected with the Santa Fe trip it was financial, chiefly. Gold was short of funds, as usual, for he was a notorious "soft touch" around the sugar company lab where he worked.

Partly because of this financial limitation, and his inborn sense of covering his tracks, he trained by upper berth to Albuquerque, then took a bus from there to Santa Fe, arriving in the city Saturday, June 2. 1945, barely half an hour before the meeting which had been planned nearly half a year before.

As he stepped off the bus Harry Gold, though earnestly acting in the interests of the communist intrigue, made the costliest decision of his life. Fearful even to ask a passerby how he might get to Castillo Street Bridge he dropped into a museum and, in the manner of a carefree visitor, picked up a souvenir map of Santa Fe. That map was to be his doom, a long time later.

But there was no warning of that doom-to-be at that time. Fuchs appeared on the bridge exactly on time, driving a battered Chevrolet coupe. He waved to Gold, who hopped in.

Fuchs was full of new information, written and verbal. A test of the A-Bomb, he reported, had been scheduled for the following month but he told Gold it was his personal opinion that the bomb would not be ready until some time in 1946. Many difficulties still had to be worked out. Since their last meeting, however, work had progressed wondrously - and he had remained in the forefront of the pioneers probing realms of research hitherto unknown to man. All these secrets he imparted to Gold, who happily returned them to New York and "John".

Fuchs Tells All

Fuchs and Gold had their final

meeting on September 19, 1945, at the door of a church on the outskirts of Santa Fe. Fuchs was late. He had had trouble getting rid of several friends in the project. But he

He described to Gold the violence of the test of the first A-Bomb at Alamogordo, which he had witnessed along with some of the most respected scientists in the world-Conant, Fermi, Tolman, Lawrence, Bohr, Wigner, Kistiakowski, Szilard, Oppenheimer and others. He had miscalculated the efficiency of America's engineering and scientific personnel, he said, but was not unhappy about it. For he was in possession of all there was to know . . . and now Gold had it, written and

At the end of their long ride into the outskirts of Santa Fe, a cloud furrowed Fuchs' brow. Everything had gone well, he conceded, but there was a worry or two. The Americans. he said, were closing doors on him and other foreign physicists, now the war was won. He would soon return to England, he reported, and he hoped aloud that his father - a German Quaker-professor who was quite garrulous - would not go through with his plan to move there.

Fuchs was vaguely afraid that the father would expose him for what he had been in Germany as a student: a Communist agitator and organizer. (Fuchs did not know that the Nazis had delivered to the British in 1942 a complete dossier on his Communist activities, a dossier which the British ignored on the ground that it was part of Hitler's program to confuse the allies.)

Meet in England

Anyway, Fuchs shrugged as his meeting with Gold ended, he would remain loyal to Communism. He would continue to work on atomic matters and deliver whatever he learned. He asked Gold to arrange with his superiors to have a new courier (British) named to contact

The men agreed on a recognition system - as involved as the one by which they themselves had met and formed a union which changed the history of mankind.

This was it, according to Gold's subsequent testimony before he was given 30 years in prison.

"Beginning on the first Saturday of every month after it had been determined that Fuchs had returned to England, at a stop on the British subway called Paddington Crescent, possibly Teddington Crescent, 8 P.M., Fuchs was to be carrying five books bound with strings and supported by two fingers of one hand; he was to be carrying two books in the other

"His contact, whoever that would be, was to be carrying a copy of a Bennett Cerf book, 'Stop Me If You Have Heard This." This was testimony which later justifiably enraged Mr. Cerf, a respected U. S. publisher, on several counts. One was that he naturally was an innocent part to such a scheme, and another was that Gold misnamed one of his best sellers: "Try and Stop

Fuchs and Gold parted, master and messenger in a catastrophic plot which, when its evil fruits were laid before the eyes of President Truman, caused the Chief Executive to blanch in horror.

The public has never been told nor will it be told - just how much information Fuchs gave away. That it was an enormous amount was seen vividly on September 23, 1949, when President Truman announced that the Russians had successfully tested an A-Bomb - an event which such authorities as Lt. Gen. Leslie R. Groves, who headed up the U. S. bomb effort, did not believe could take place until some time in the 1960's, if then.

(Next issue: The Man Harry Gold, His Informant Sgt. David Greenglass, and the Doomed Rosen-



GET ACQUAINTED was the theme of the Sandia just that when pictured: L to R: Paul Agar, Mrs. Base AEC and SFOO party at the Coronado James C. Hobart, Mrs. Marcella Stern, Pat Turan, Club last week. One group at the party was doing

Mike Turan, Mrs. Paul Agar and Adm. G. P. Kraker.

202 Newcomers Join Company During July

Two hundred and two newcomers joined Sandia Corporation during July. Coming from 31 states and the District of Columbia, these new employees have attended 62 colleges and universities. A well-educated group, 74 men and 13 women have degrees ranging from Bachelor of Science to Doctor of Philosophy. Forty-two of these degree-holders graduated this year.

Of the new employees 149 are married and they have 151 children in their families. Following are some statistics concerning these new

Former Home States 3 New Jersey

Arizona 3	New Jersey 4
California 7	New Mexico 93
Colorado 3	New York 2
Delaware 1	Ohio 5
Florida 1	Oklahoma 1
Idaho 4	Oregon 3
Illinois11	Pennsylvania 6
Indiana 7	South Carolina 1
Iowa 2	Texas 8
Kansas 1	Utah 2
Kentucky 2	Virginia 3
Maine 1	Washington 5
Maryland 2	Washington
Massachusetts 4	D.C 2
Michigan 5	Wisconsin 6
Minnesota 3	Wyoming 2
Missouri 2	
Dograaa Hald	by Graduates

Degrees Held by											
Bachelor of Science				6					à.	. (54
Bachelor of Arts								,			22
Master of Science .									4		8
Master of Arts	+		1	ě.		×	*				8
Bachelor of Law					÷	÷		÷		¥	1
Doctor of Letters											
Doctor of Philosoph	y		16				*				2
Calleges A			1		1						

Colleges Attended U. of Wisconsin, U. of Idaho, U. of Washington, U. of New Mexico, U. of Illinois, U. of Oklahoma, U.

of Louisville, U. of Wyoming, U. of



LORENTZ FAMILY REUNION - It has been a big summer for Norbert A. Lorentz, 1951, and Mrs. Lorentz. Visitors in their home have been their children and grandchildren who are pictured here at Santa Fe. L to R: Mrs. Patricia Lorentz Titus, Lucia Lorentz, Mrs. Norbert A. Lorentz, Robert Lorentz, Patricia Titus, Norbert A. Lorentz III, Norbert A. Lorentz II, Norbert A. Lorentz, Tommy Greiner and Mrs. Gloria Lorentz Greiner.

Colorado, U. of Arizona, U. of Iowa, U. of Connecticut, U. of Minnesota, U. of Virginia, U. of California, U.

of Oregon.

Ohio State University, Princeton University, Johns Hopkins, LaSalle Extension University, Texas Tech, Stanford University, Purdue University, Clarkson College, New York University, State College of Washington, Phillips University.

South Wales School of Mines, Yale University, Carnegie Institute, California Institute of Technology, Cornell University, Union College, Highland University, Marquette University, Stevens Institute of Technology, Pueblo Junior College, Oberlin College, Texas College of Arts.

Oklahoma A & M, Durfee Technical Institute, Eastern New Mexico University, Iowa State College, Drexel Institute of Technology, Northeastern University, Utah State Agricultural College, Dickinson College, Northwestern University, New Mexico A & M, Louisiana Polytechnic Institute.

Michigan State College, Reed College, Kansas State College, U.S. Military Academy, Abilene Christian College, St. Mary's College, Linfield College, Adams State College, Colorado A & M, Idaho State College, Agnes Scott College.

Betty Van Gundy is vacationing with her children in the Sandias while enjoying a vacation from 4131.

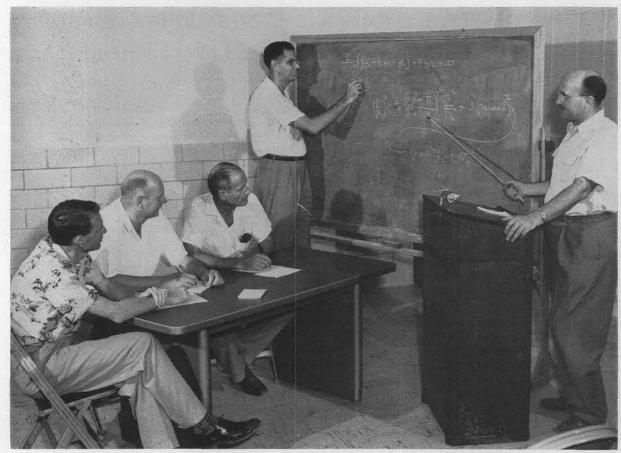
Bill Lew and his family came home to recuperate after their trip to Kansas. Bill, 4131, helped with the harvest while there.

Because Kay Graff, 4131, is fishing her way through her vacation, her co-workers are expecting to hear about the "one that got away" when she comes back.



COMMUNITY CHEST PLANS were discussed recently at a meeting of Sandia Corporation and Albuquerque Community Chest officials. L to R: F. L. Dewey, outgoing chairman of the Sandia Corporation Committee; C. W. "Curly" Eggert; T. E. Shea, member of Board of Directors of Albuquerque Community

Chest Drive; Kenneth Shinn; T. B. Sherwin, Fred Smith; R. J. Hansen; A. L. Spengeman; Robert Cox; Jeff Greer, Executive Secretary of Albuquerque Community Chest; H. W. Sharp; Al Cadwell, Albuquerque Community Chest official; and H. J. Wallis, Chairman of Sandia's 1952 Community Chest Committee.



EINSTEIN-LIKE EQUATIONS are discussed by five professors working here at Sandia for the sum-

mer. L to R: Dick Dove, John Cooper, Theo Hatfield, Millard Barton and Gene Buell.

Professors Leave College Campus During Summer And Come to Work for Sandia Corporation

It's a good teacher who is so well remembered by his students that he is called on to help them after they have entered the business world. That's just what has happened here at Sandia.

Ken Erickson, manager of department 5130, who is a graduate of the University of Texas, has called on Dr. Theo "Bud" Hatfield, Ken's erstwhile physics professor, to help out at Sandia this summer. In addition to Dr. Hatfield, Ken has asked three other professors to aid him during the summer period. They are Dr. Millard V. Barton, a colleague of Dr. Hatfield and professor of engineering mechanics and aeronautical engineering; Dr. John N. Cooper, associate professor of physics at Ohio State University; and Dr. C. Eugene Buell, associate professor of mathematics at the University of New Mex-

Back to Alma Mater

Another teacher, also working here during the summer, is Richard C. Dove, assistant professor of mechanical engineering at the University of New Mexico. In September Dick is going back to his old alma mater, Iowa State College, to study for his Ph. D. in theoretical and applied mechanics on a National Science Foundation Fellow-

Get five teachers together and the subject sooner or later turns to students. Bud Hatfield, who goes from here to a post as professor of physics at the University of Houston, declares that his pet peeve is the student who won't work and even worse than that is the student who falls asleep in class. For this type Bud once applied a drastic cure.
"During a lecture one day," he re-

calls, "I noticed a student sound asleep with his head back and his mouth open. It was too good an opportunity to miss so I kept on with the lecture and at the same time walked down the aisle to the student's desk and dropped a piece of chalk in his mouth. Woke him up right away. As a matter of fact that whole class stayed pretty alert the rest of the semester.

Barton's Trick

In teaching as in most jobs there are tricks of the trade and Millard Barton is willing to reveal one of his ruses.

"In working out a problem on the blackboard I'll sometimes throw in several mistakes and keep on working out the problem to an impossible conclusion. Then it's up to the class to backtrack until they find where I went wrong. It sort of keeps them on their toes and provides a little healthy competition between them and me. Besides, if I ever happen to make a real mistake I can always claim I did it on purpose.

As a guide to teaching methods Gene Buell remembers when he was a student and models his teaching practices along the lines of his likes and dislikes in those days.

"I remember how annoyed I used to get at unreasonable teachers," Gene says, "especially those who cluttered up their courses with little finicky rules and regulations. Today I make it a practice to use logic as it applies to the circumstances rather than make any hard and fast rules that might turn out to be unfair in a particular case.

Harder Working Vets

Every one of the professors had veterans as students during the big rush that followed World War II. John Cooper expresses the views of the others when he says that "veterans as a rule were harder working students. Of course some of them were just along for the ride on the G. I. Bill, but they were in the minority. Considering the fact that most of them had been out of school for some time and as a result were rusty on their math, it's to their credit that they maintained so high a scholastic average.

While keeping up interest in the course wasn't too much of a problem with the industrious veterans, it's of acute importance to teachers with the general run of students, according to Dick Dove, 1532.

"It's no use reminding students constantly of how important all you're telling them will be once they graduate. It just gets monotonous. Instead I try to keep up interest by giving homey examples of everything I teach. Whenever possible I relate whatever theory is being taught to the Albuquerque area or even to the campus.'

In many ways the importance of men such as these five is not fully realized. To them belongs a large part of the responsibility of molding the youth that will always become the strength of this country. It's good to have them with us for a while.

Sandians' Inventions Add to Nation's Growing Arsenal of Arms for Defense

An invention, according to Webster, is "a device, contrivance or the like, originated after study and experiment." when an in of classified in Actually this definition is a bit skimpy. Men who work with inventions, like Patent Manager Donald MacKenzie, define it as "a new device or method which has utility and which to be conceived requires more than the expected skill of the ordinary worker in the

Of necessity this definition is still pretty skimpy. No one knows this better than Don MacKenzie who is responsible for the investigation of anything developed here at Sandia which might conceivably be patented.

The fantastic variety of inventions that have already been patented makes it almost impossible to state a specific definition of what actually constitutes an invention. The Patent Department's chief job is to bring patent possibilities conceived by Corporation employees to the attention of the AEC.

Don, and Charles Dodson, 6010, are perpetually on the lookout for patentable innovations. As a part of their work they review notebooks handed in voluntarily by employees. The bulk of invention possibilities, however, are brought in by the inventors or their supervisors.

The Patent Department has much literature on patents and procedures which is available to employees. Members of the department will be glad to discuss problems pertaining to patents which are confronted by inventors.

The first step in the processing that leads to the U. S. Patent Office in Washington, D. C., starts with a discussion of the proposed idea. Don, Charlie and the inventor talk it over and if the idea looks promising the inventor fills out a Record of Invention form which includes the title, description and date of the invention. With this as a guide the Patent Department prepares a more extended description, called a Disclosure of Invention, for the AEC Patent Office at SFOO. If necessary, drawings accompany this

The next step takes the invention from New Mexico to the Headquarters AEC Patent Branch in Washington, D. C. They institute a search of the U. S. Patent Office files to see if anyone beat our inventor to the idea. The conclusion and patent references are then sent back to Sandia. The conclusion is studied here by the Patent Department which usually concurs but has the option of disagreeing and informing the AEC Patent Branch of that

Finally, after all this processing, the big moment comes and the AEC decides whether or not to file a patent application with the U. S. Patent Office. If they file the application and the invention is patented it becomes public property. It's a little known fact that there are thousands of inventions on file at the U.S. Patent Office that are available for manufacture to any American upon payment of a small licensing fee.

That's what happens to many Sandia inventions. They're patented and then made available for the benefit of the

When an invention enters the realm of classified information the application follows much the same process, but it stops just short of the actual granting of the patent. There the prospective patent is held in abeyance, but the idea is still protected by patent laws. If the day arrives when the invention is no longer considered subject to security regulations the patent is granted. In the meantime the classification is observed and Uncle Sam's defense secrets are safe.

Meanwhile back here at Sandia the story of the invention is added to the inventor's personnel file where it plays a big part in considerations for advancement, even though he receives no royalties from the invention.

And so the search goes on-the never ending search by our Patent Department for the new and different, the quick, efficient, intelligent way of doing things.

Promotions

JOHN H. TENBRINK has been promoted to section supervisor of



1283-1. He joined us in 1950 after half a year with the U. S. Bureau of Reclamation at Ben Hur, Colo., as a design engineer. John has also worked three years as a tool

engineer with Beech Aircraft Corp., Wichita, Kans., and two years in the same work with Douglas Aircraft Corp., Tulsa, Okla. He is a veteran of two years in the Air Force and he has a B.S. in mechanical engineering from Kansas State

LEE E. DAVIES was recently appointed supervisor of Division

1222. He came to the Laboratory in 1949 after a total of three years with the Mountain States Telephone and Telegraph Company. The first year with the company he



worked as a telephone installer throughout New Mexico. The next two years were spent as a junior engineer in El Paso, Tex. Lee is a veteran of three years in the Army and has a B.S. in mechanical engineering from New Mexico A & M.

Bernice Duke, 4133, expects her son home from Korea late in Octo-

New Employees

A welcome is extended to the followg newcomers who joined Sandia Coing newcomers who joined Sandia Cor-

John A. Larson		1231
lames A. Stark, Ir.		1261
Willa W. Beach		1261
Willa W. Beach Andrew D. Fliss		1264
Daniel V. Lotz		1281
Lyle A. Dillingham		1321
lack B. Marceau		1.221
Alexander Thom		1511
Robert E. Wooley Walter A. Adams		1521
Walter A. Adams		1521
Grover C. Hartman		1521
Ellis L. Roper		1521
George B. Holladay William E. Lane		1521
William E. Lane		1532
Lloyd R. Myers		
Juan M. Mata		1532
Gordon J. Miller		1542
Orvis E. Bush	1110	1546
William E. Eckelmann		1716
Marjorie Garwood Ruth M. Davidson		1812
Ruth M. Davidson		1931
Lewis S. Sorley, Jr. Jerald J. Johnson		1931
Jerald J. Johnson		1932
Frank C. Rivera		1932
Richard D. Curry		1951
Elsie M. Ryan Robert A. Gallagher		1951
Robert A. Gallagner		1951
Lois M. Gentry Clifford C. Savage		2121
Chillord C. Savage		2122
Benedict F. Guerin Robert W. Whitten		2144
Donath D. Tarren		2222
Dorothy R. Lucas Raymond Saiz Roy A. Rogers, Jr.	• • • •	2222
Raymond Saiz		2224
Holon F Wolles		2234
Helen E. Walker	• • • • • • • • • • • • • • • • • • • •	2224
Charles Z Mitchell	****	2411
Charles Bray Charles Z. Mitchell Emily I. Edwards		2441
Doul M Hookt	* * * * *	2442
Paul M. Hecht		2432
Margaret G. Malone		2454
Louise M Mayors		2533
Dorothy F Word		2522
Louise M. Meyers Dorothy F. Ward Harold E. Beadersted		2541
Vega I. Testman		2542
Vega L. Testman Frederick H. Poe		2542
Carl E Drew		2545
Carl E. Drew Evelyn C. Dawson		3153
Dreight Charles waste contribute		0130

Eleanor K. Hughes
Catherine Banks
Betty J. Thompson4135
Rodney V. Phillips4151
Edward G. Connelly4152
Elizabeth Pehrson
Letha P. Stewart 4222
Dorothy L. Miller4222
Rosemary Socha
Gloria C. Garcia
James L. Anderson
Joseph E. Duffy
Craig C. Hudson 5112
Lloyd W. Davis 5131
Cyrus R. McAllister5131
Blanche Griscom 5243
Merle D. Elifritz 5421
John L. Hilton 5431

Mrs. E. W. Baldwin New Chairman of Sandia Garden Club

Mrs. E. W. Baldwin was elected chairman of the Sandia Base Garden Club when the group held their monthly meeting at the Officers Club July 22. Serving as officers with Mrs. Baldwin for the coming year are the following: Mrs. W. J. Cocke, secretary; Mrs. C. H. Bidwell, treasurer; Mrs. A. J. Clark, publicity chairman; Mrs. L. A. Hopkins, program chairman; Mrs. A. R. Miles, hospitality chairman; and Mrs. C. W. Carnahan, who will be the Sandia Club's representative to the Albuquerque Council of Garden

Mr. Quarles' Son Helps IBM Solve Long-Time Problem

Donald A. Quarles, Sandia's president, is a proud father today. His son, Donald A. Quarles, Jr., helped solve a problem that has been puzzling scientists, for 60 years. The story appeared in Science News Letter, a weekly technical magazine, recently.

The problem was whether a stream of fluid flowing at a uniform speed between two plates becomes turbulent. Scientists have now calculated that fluids of low viscosity when moving rapidly become unstable without any outside influence.

This answer was given by Columbia University's "mechanical brain," the International Business Machine Selective Sequence Electronic Calculator. Donald A. Quarles, Jr., and another IBM scientist took equations worked out by a Columbia physicist and adapted them to the giant cal-

The solution is expected to make easier the design of aircraft, steam turbines, hydro-electric power generating machinery and other devices involving fluid flow.



EXAMINING A NEW DEVICE which may hold patent possibilities are Patent Manager Donald MacKenzie (center in white coat) and Charles Dodson, 6010. Walter Haskell, 5143, (right) who collaborated with Herschel Waldorf, 2126, (left) points out the workings of the model.



IT'S A BEAUTIFUL DAY (and a beautiful girl) when Ann Morrow, 1210, visits the swimming pool at the Coronado Club. Ann loves the sun and water - and we think it's a good idea.

Classified

FOR SALE-

Sun Visor with traffic light finder. Custom built for a Pontiac, A. F. Fields, ext. 31248 or Alb. 5-6006.

Camera, brand new, factory boxed, never used, factory guarantee, Busch-Pressman, 2½ x 3¾, f. 4.5 Wollensak lens and 3 cut film holders, value, \$150, sell for \$100; large leather gadget bag for 2½ x 3¾ camera, new cost \$30, sell \$18. Solar Enlarger, 2½ x 3¾, and lens, \$30—want or trade for 4x 5 enlarger. Pacific Super Tool complete for 30-06, hardly used, cost \$42.50, sell \$30; automatic primer, \$5.00 extra. Blythe Doleshal, ext. 26149.

Trailer, one wheel, heavy duty, with side boards, \$60, also 1940 GMC dump truck, 2-ton, \$400. W. Rademacher, ext. 22260 or Alb. 6-0120.

All Aluminum Spartan Royal Mansion, the "Cadillac of Housetrailers," 33', sleeps 6, complete bath and all extras. Like new. Delivers, for \$5,300. Asking \$3250, can finance and will consider car part payment. Le Compte, ext. 37227, Alb. 5-3261.

Large Kenmore washer, excellent condition, semi-automatic. Original price \$130, now \$70, Janza, ext. 7137.

Westinghouse roaster oven, Cat. No. RO-91 and Westinghouse timer clock, both for \$37.50. Call Alb. 5-3429, see at 325 Utah St., SE. Frank A. Baczek.

Thayer baby buggy, like new, used two weeks. \$30. See at 301 Menaul Blvd., NW, or call ext. 3-2149. Chaffee.

Washer, Easy Spin Dryer, excellent condition, \$80. J. V. Durant, 3268 47th St., Sandia. Duty hours call ext. 24150, after call ext. 29272.

Movie Mite sound 16 mm. projector; Bolex H 8 Deluxe model movie camera with attachments—1/2" Pizar f: 1.9 lens; 11/2" Yvar f: 2.8 lens; filters; cable release, prismatic view finder, with case. Apply after 6 p. m., Glen A. Antoine, 332 General Bradley, NE, or ext. 24146.

'50 Harley Davidson 740 H. V., low mileage, all extras. \$550, or will trade for car. Felix Castillo, ext. 5145 or 5136.

2 pc. solid Maple living room suite, slip covers included, \$50 or best offer. Baby-Tenda with feeding chair, \$15, youth chair, \$3. R. H. Koontz, ext. 7137 or see at 8714 Woodland Ave., NE, Hoffmantown.

One-wheel All-state trailer, \$40, E. C. Moser, 2315 General Arnold.

Two double beds with innerspring mattress and springs (Simmons) complete, \$35 each set. Coolerator \$10. Cardboard wardrobe, \$4. Elec. refrigerator, \$10. Ice box, \$5. See at 807 North 11th St. Alb. 6-0280 or ext. 25247, Glenn Wright.

27' house trailer, electric refrigerator, stove, \$595, 343 So. California St., D. F. Lange, ext. 23247.

Man's and woman's light-weight English 3-speed bicycles. \$25 each. T. E. Smart, ext. 7165 or Alb. 6-1551.

'49 Pontiac 4-door deluxe six, all accessories, new tires. A-1 condition, original owner. \$1,800. H. R. Hanen, ext. 25268.

Kardon (American Leica) f:2 lens, carrying case, 127 mm telephoto, original price \$525. Will sell for \$350. R. E. Scharpen, ext. 2-6166.

'49 Chevrolet 4-door, R and H, Overdrive, new tires. Can be seen at 7918 East Central, Chevron station. \$1295. L. O. Wicke, ext. 27141.

'49 Ford, Custom, 4-door, Radio and Heater, \$1,000. C. G. Soerens, ext. 6158.

1949 M-System House Trailer, 28' tandem dollies, electric brakes. Extremely elean, modern, new interior decoration, air cooler, 1952 license. Orville Howard, Marco Polo Trailer Lodge, 8901 East Central, ext. 29155.

Console model radio, walnut cabinet, excellent condition, 10-tube, with powerful magnavox speaker and 10 new extra tubes, \$30. D. E. Rauch, ext. 4144 or Alb. 5-41-2

Bendix automatic washer. Perfect operat-ing condition. \$100. Call Alb. 5-1450, 909 Avenida Cielito, Fred Leckman.

'48 International Green Panel truck with motor rebuilt. One owner. Cash basis only \$650. Gloria Palladini, Alb. 6-1275, or see at 2846 Morningside Ave., NE, Bel-Air.

Three-bedroom brick home, Inez addition. Hardwood floors, lawn, sprinkler, wall. 2033 No. Pearce (Virginia NE). R. G. Parkison, Alb. 6-0164.

Deluxe Universal washer, automatic timer, 9-pound porcelain tub with pump, safety release wringer, good condition, \$50. Kay Graff, 5508 Rosemont Ave., NE; ext. 31241.

Three-bedroom Inez home, \$13,250. Includes 134 bath, wall, front and back sprinklers, completely landscaped yard, cooler, dishwasher, laundromat, stove and refrigerator. 2327 Hendola Drive. Jack Jensenius, Alb. 6,3050

Combination vacuum cleaner, Airway, has 2 good motors, \$9; heavy duty start-stop switch for elec. motor, \$2; Grayson controls for automatic water heater, gas, \$4; thermostat controls and all plumbing connections for automatic operation of gas furnace, \$8. Sherwin, ext. 26150 or Alb. 5-8866.

Portable General Electric Dishwasher, good condition. \$75. Call Denton, Alb. 6-3007 evenings after 6.

Two bedroom house frame-stucco, 929 Ma-diera Dr., SE. Low down payment. Frank Sandoval, Alb. 5-6708.

120 Bass Dwarf size Noble accordion. One-half new price. Used 1½ years. \$197.50. Brown, Alb. 5-8052.

Stenotype Machine, \$75. Gragg, ext. 21261 or Alb. 3-5827.

Washing machine, \$25, Walter Hook, 1013 California St., SE, Alb. 6-0281 or ext. 4245.

18½ cubic ft. Coldspot home freezer, excellent condition, \$325. Ray Reasner, 304 Espanola St., NE.

Fishing outfit, tackle box, 2 fly rods, 1 casting rod. Flies, plugs, reels and lines. Also large doll buggy and small air compressor and motor. Call Alb. 5-8589, D.

Typewriter, Royal Standard, Spanish letters, excellent condition, \$100, or best offer. Virginia Chavez, ext. 23164 or evenings, Alb. 2-8991.

Boston Terrier Puppies, males, AKC registered, \$50 and up. June Kelly, ext. 24259 or Alb. 2-8730.

Two bedroom home, block wall front and back. Landscaped in front, Chemistruck, ext. 28249 or Alb. 5-0255.

1951 Crosley Station Wagon, good condition, Chemistruck, ext. 28249 or Alb. 5-0255.

1951 Oldsmobile "98" Convertible, \$2450, or consider trade for late model Ford or Chevrolet. Jim Reck, ext. 23255 or Alb. 4-0468.

Grill and shell for '40 Packard, William Weaver, ext. 33236 or Alb. 4-4897.

1942 Plymouth Station Wagon, good motor, 3 good tires, overload springs, Lee Stin-nett, ext. 26143.

Hollywood bed, practically new, \$50. Frances Tomlinson, 1501½ West Central,

Sell or trade. Thor automagic washer, sealed unit, four years left on guarantee. Retails \$225, asking \$112.50. Also rare Ihagee-Dresden chrome Exacta "B" reflex camera, with filters, case, flashgun, f2.8 ebated lens. Speeds from 12 seconds to 1/1000th. Excellent for action, portrait, copying, and color work on 127 film. Paid \$200, asking \$120. Or will trade on better-than-average piano (no converted players, please.) LeCompte, ext. 37227 or Alb. 5-3261.

Choremaster garden tractor, 2½ hp motor, versatile, 1 year old, excellent condition, \$150. Hanen, ext. 25268.

Corporation Teams To Enter Military Touch-Football Play

Two touch-football teams comprised of Sandia Corporation employees will be entered in the Military touch football league this fall. All Sandia Corporation and AEC employees interested in playing on one of the teams are asked to attend a meeting Monday evening, August 18, at 7:30 p.m. in the new gym-

The Military league will consist of 20 teams in two divisions. All games will be played on the Sandia baseball diamond. Two games will be played nightly, the first one beginning at 6:45 p.m. Each team will play once a week.

The touch football season will start Sept. 2 and will last until Nov. 14. Additional information may be obtained by phoning Dick Heim at Employee Services, ext.

Sandians Manage Softball Teams in **Exhibition Game**

Two City-County softball teams managed by Sandia Corporation employees will play an exhibition game at Tingley field Saturday, Aug. 16 at 8 p.m. The teams are Aero Food Market, managed by Charles A. Garcia, 2417, and St. Francis, managed by Tom Hernandez, 2126.

Aero Food Market is in second place in the National Division of the league. St. Francis is tied for first in the American Division.

Other Sandia Corporation employees playing on the two teams are: Eloy Barela, 2124, and Larry Callahan, 2235, on the St. Francis team. Sam Tabet, 2124, Frank Chavez, 2235, Morrie Chavez, 2461, Ernie Santillanes, 2232, and Lincoln Metzger, 2412, on the Aero team.

Admission to the game is 50 cents.

Shop Smith, 5 power tools in one, including bench, set of lathe turning tools and other attachments. Used one month. \$220. Also have a practically new jigsaw. May be seen at 1504 Princeton Ave., NE, or call Alb. 5-9022. D. White.

1951 %-ton Chevrolet pick up. Extra clean. Low mileage. 812 Arizona, SE. Martin Krause.

RIDE WANTED—

From 14th and Silver, or vicinity, Shirley Sample, ext. 25240.

307 Aliso Dr., SE, to Adm. building. Harriet Evans, ext. 23141, or Alb. 5-7890.

From vicinity Cherokee Road and Menaul to South gate. Frances Firestone, ext.

From Coors and Blake Road to or near Bldg. 800. Raymond Arnold, ext. 4160 or Alb. 2-6504.

From 3003 N. Monroe to South Tech Area gate. Barbarra Bowman, ext. 25254.

Corner of 5th and Lomas Blvd. Margie Baca, ext. 23257. From vicinity 900 block Monroe, NE, John Airber, Alb. 6-1657.

Ride, or join car pool, from 13th and Lomas Blvd., NW. Catherine Mitchell, ext. 24169.

Ride to south tech gate from 3800 block Lomas Blvd., NE, Barbara Caine, ext. 33133.

crest area. Adams, 4628 Eastern Ave., SE, ext. 7157.

To join car pool from 2020 Palomas Dr., NE, to Adm. Building. Dorothy Ward, ext. 25146.

1142 Vassar Dr., NE, to North tech gate.

Joanne Boyd, ext. 27145 or Alb. 6-2756.

FOR RENT-Two-bedroom house, completely furnished, dishes, linen and silver, Hotpoint kitch-en, automatic washer, available Sept. 1, Tatum, Alb. 5-6268.

Newly furnished one bedroom apartment, \$85 mo. Adults. 2936 Osage Ave., SW. Young, Alb. 3-9966.

WANTED-

Child's play equipment. Swing, bars, slide, sand box, etc., in good condition and reasonably priced. Adams, ext. 7157.

Woman wanted to share house. 529 California, SE. \$45 rent and sundries. Alb. 6-1083 or Alb. 5-8781, ext. 317, Mamie Burg.

Late model Ford Tudor, sedan or club coupe. Lee Stinnett, ext. 26143.

TRADE-

\$540 equity in 1947 Mercury Club coupe with all extras, for 1942 model car. J. A. Floyd, Alb. 5-9475.

Brown wallet, finder may keep money, but please return billfold and other contents to Henry Hinrichs, 2232, or call ext. 33236.

Ronson lighter, ladies', black, found in parking lot in front of Bldg. 800 at 5:15 p. m., Aug. 7. Call ext. 26149 or pick up at Employee Services, Bldg. T-301.

Tigers Win 12-Straight to Come from League Cellar to Chief Contender Spot

"Will the Tigers get into the playoffs?" That was the big question being asked by player and spectator alike as the Sandia Corporation softball league went into the home stretch.

The Tigers, the miracle team from 2233, come from the bottom of the league a few months ago to become one of the most threatening contenders for the league's crown. An impressive 12-game

winning streak brought the Tigers up the league's ladder to a slot just below the top four teams. Their string of victories was broken last week, however, by the 2545 Cubs. That defeat may ruin their chances of getting into the playoffs.

Great Hurling

A big factor in the Tigers' winning streak was the superb pitching of Dan Grimm. Grimm won 11-straight before Robinson's Cubs stopped him.

One of the Tigers' more exciting victories was against the 2122 Giants. The score was tied fourall in the top half of the seventh. The Giants had two runners in scoring position with only one out. One of Max Gasta's Giants came to the plate and belted a hard hit line drive toward second base. Ken Miller, Tiger second baseman, raced for the ball, jumped in the air, snagged it with his gloved hand and stepped on second for an unassisted double play. In the bottom half of the same inning, Dan Grimm won his own ball game by driving in the winning run. Final score: Tigers 5, Giants 4.

Sam DeHaan was the man who turned the tide against the Tigers when the Cubs stopped their winning streak. Sam pitched faultless ball, yielding only three hits, to win his 17th game of the season. Larry Callahan sewed up the win for De-Haan by hitting a three-run homer in the fourth inning.

Recover from Slump

This was the Cubs' fourth straight win after recovering from a 4-game losing slump. Their hold on second place was becoming very shaky before they got back into their winning ways.

Jim Schlahta's 2542 Senators retain their hold on first place. The Club are in second place, two and a half games out of first. The Giants are in third and Art Eiffert's 1200 Indians are in fourth.

The above teams probably will be the playoff contestants. The Tigers still have a chance of sneaking into the post season tilts, but only if they win the remainder of their games, and the Indians and Giants lose all the rest of theirs.

The playoffs will start some time next week, as soon as all the postponed and cancelled games are played. The winner of the playoffs will be the 1952 softball champs of Sandia Corporation.

					Gam
(a)	Name	Won	Lost	%	Lef
2542	(Senators)	20	5	.800	2
2545	(Cubs)	18	6	.750	3
2122	(Giants)	17	7	.708	3
1200	(Indians)	16	7	.695	4
2233	(Tigers)	16	10	.615	1
1500	(Pirates)	13	12	.520	2
1230	(Athletics)	11	14	.440	2
1951	(Browns)	6	20	.231	1
2452	(Braves)	5	20	.200	2
2440	(Yankees)	2	23	.080	2

Available for Open **Bowling Two Nights**

Coronado Club bowling alleys are available for open bowling on Wednesday and Friday evenings from 5 to 11 p.m. and on Sundays from 2 to 11 p.m., it was announced recently.

In order to keep pinboys on hand during these nights the Club Board of Directors at a recent meeting voted to guarantee the pinboys a minimum of \$2 on week nights and \$4 on Sundays.

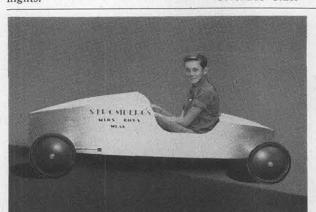
The alleys are reserved for league bowling on Tuesday and Thursday nights.

Coronado Club Alleys Corporation Bowling League Elects Officers

LeRoy Huenefeld was elected president and Charley Kaspar secretary-treasurer of the newly organized Sandia Corporation Bowling Association at a recent meeting of officers of the four bowling leagues.

The newly formed organization will coordinate activities of the four leagues.

The '52-'53 bowling season will get underway the week of Sept. 22. All matches will be played at the Coronado Club.



SOAP BOX RACE DRIVERS these two sons of Sandia employees. Top is David Hahn, runner-up in the "B" class of the Albuquerque derby, and below



is Tom Moffat in his "Carco Special." David is the son of Harry, 2123, and Gerry, 2410, Hahn. Tom is the son of W. T. Moffat, 5210.